## ABSTRACT OF THE DISCLOSURE

A spread spectrum detector employs a Doppler phase correction system that improves correlation of pseudo-noise (PN) codes to a received spread spectrum signal by combining phase shifts to correlation values, using a fast fourier transform (FFT), that

5    compensate for the Doppler shift error that is inherent in the signal and that is imposed upon the signal by movement between the signal source and receiver. In architecture, the Doppler phase correction system includes a receiver to receive a spread spectrum modulated signal having the Doppler shift error. A multiplier produces a plurality of complex first correlation values based upon the signal and a code. A phase shifter

10    generates a plurality of complex second correlation values respectively from the first correlation values using an FFT. The second correlation values are phase shifted by respective different amounts from corresponding first correlation values, so that the second correlation values exhibit less of the Doppler shift error than the first correlation values. A combiner, such as an integrator, combines, or integrates, the second correlation

15    values to derive a third correlation value that indicates a degree of correspondence of the code with the signal.